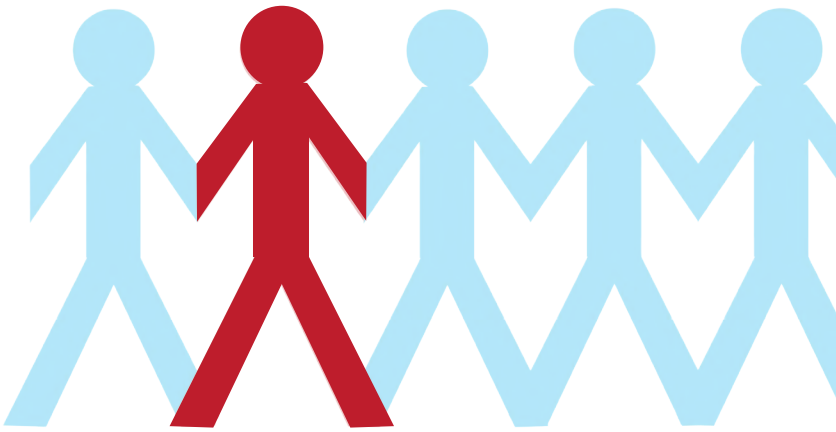
Missouri Cancer Action Plan 2016-2020



Prevention

It is estimated that 50-75 percent of cancer deaths in the United States are caused by three preventable lifestyle factors: tobacco use, poor diet and lack of exercise.[15] Furthermore, the risk of getting cancer can be reduced in a variety of ways, including eating healthy and keeping a healthy weight, avoiding tobacco, limiting alcohol consumption, protecting your skin from the sun, and getting recommended screenings.

Lung cancer continues to be the leading cause of cancer death, and cigarette smoking causes most cases. Compared to nonsmokers, men who smoke are about 23 times more likely to develop lung cancer and women who smoke are about 13 times more likely.[28] Smoking causes about 90 percent of lung cancer deaths in men and almost 80 percent in women.[28] Smoking can also cause cancer of the voice box (larynx), mouth and throat, esophagus, kidney, pancreas, cervix, bladder, colon, rectum and stomach, and causes acute myeloid leukemia. Adults who are exposed to secondhand smoke at home or at work increase their risk of developing lung cancer. Concentrations of many cancer-causing and toxic chemicals are greater in secondhand smoke than in the smoke inhaled by smokers.

Although the exact links between what we eat (or don't eat) and some types of cancers are not yet clear, it has been estimated that one-third of all cancer cases in the U.S. are related to poor nutrition, being overweight or obese and physical inactivity, and could possibly be prevented.[13] In addition, research has shown that being overweight or obese substantially raises a person's risk of getting endometrial (uterine), breast, prostate and colorectal cancers.[26] Overweight is defined as a body mass index (BMI) of 25 to 29, and obesity is defined as a BMI of 30 or higher.

Certain infectious agents (i.e., viruses, bacteria and parasites) can also cause cancer in infected people or increase the risk of developing cancer. Types of human papillomavirus (HPV) cause many of the cervical and gynecological cancers in females and penile cancers in males. HPV also causes anal cancer and oral cancers. Experts recommend that children ages 11 and 12 receive the HPV vaccine that prevents the infection.[29] Hepatitis B and hepatitis C viruses can cause liver cancer.[30] Experts recommend that individuals get vaccinated against hepatitis B and seek treatment if either virus is detected. Additional cancers may be related to other infectious agents. The best ways to prevent these cancers are by getting vaccinated, not having unprotected sex, not sharing needles and being tested and treated.

Skin cancer is the most common form of cancer in the U.S. Exposure to the sun's ultraviolet (UV) rays appears to be the most important environmental factor involved with developing skin cancer. To help prevent skin cancer while still having fun outdoors, seek shade, apply sunscreen regularly, and wear sun-protective clothing, a hat and sunglasses.

Goal 1: Reduce incidence of cancer by promoting healthy lifestyles and reducing environmental hazards

Objective 1: By December 31, 2020, decrease the percentage of Missourians who smoke cigarettes

Measure: Adults – from 22.1% in 2013 to 19.7% (BRFSS)
Youth in grades 6-8 – from 4.0% in 2013 to 2.0% (YTS)
Youth in grades 9-12 – from 14.9% in 2013 to 10.0% (YRBS)
African-American Adults – from 22.6% in 2013 to 20% (BRFSS)
Annual household income less than $15,000 – from 38.9% in 2013 to 30% (BRFSS)

Target Audience: Youth, adult Missourians who smoke and policymakers

Strategies:

1. Collaborate with Tobacco Free Missouri and other partners to reduce smoking
2. Advocate for funding for the Missouri Tobacco Quitline and local cessation efforts, including nicotine replacement therapy
3. Encourage local coalitions to promote the Quitline and local cessation efforts
4. Support an increase in core state funding for the Comprehensive Tobacco Control Program from $0 ($1.2 million one-time funding in 2009-10) to $72.9 million (CDC's recommended level)
5. Disseminate the latest tobacco prevention, cessation and control research findings as available
6. Disseminate county level data to local coalitions and local public health departments

Objective 2: By December 31, 2020, increase the percentage of Missourians who are living in communities with a comprehensive smokefree policy

Measure: From 24% in 2014 to 30%

Target Audience: All Missourians and policymakers

Strategies:

1. Advocate with Tobacco Free Missouri and other partners for a smokefree Missouri
2. Increase the number of Missouri communities that implement comprehensive smokefree policies for all workplaces and public places
3. Increase awareness among education and community officials of the benefits of creating tobacco-free environments for youth
4. Advocate for tobacco-free mental health and substance abuse facilities
5. Advocate for expanded policies to prohibit smoking in childcare facilities, on the grounds and in vehicles at all times
6. Advocate for tobacco-free correctional facilities
7. Advocate for comprehensive tobacco-free higher education campuses and vehicles

8. Advocate for comprehensive tobacco-free school districts
9. Actively communicate evidence-based comprehensive cancer control activities, outcomes and successes to relevant constituencies (e.g., media, policymakers, health departments, the public)
10. Identify state and local leaders who can communicate the value of comprehensive cancer control to the public, the media and policymakers
11. Identify partnerships to implement the Missouri Comprehensive Tobacco Control state plan

Objective 3: By December 31, 2020, decrease the percentage of Missourians who are overweight and obese

Measure: Obesity: Adults – from 30.4% in 2013 to 27.2% (BRFSS); African-American adults – from 38.9% in 2013 to 35.6% (BRFSS); High school youth – from 14.9% in 2013 to 13.8% (YRBS)

Having no leisure time physical activity in the past month (BRFSS)
Adults – from 28.3% in 2013 to 25%
African-American women – from 26.8% in 2014 to 24.0%

High school youth who are physically active at least 60 minutes per day on 5 or more days – from 45.4% in 2013 to 50% (YRBS)

Consumed fruits less than one time per day (BRFSS)
Adults – from 55.4% in 2015 to 53.4%
African-American women – from 61.3% in 2015 to 60.0%
Adults with less than a high school education – from 64.5% in 2015 to 63.0%

Not eating fruit one or more times during the past 7 days
High school students – from 12.8% in 2015 to 11.0% (YRBS)
Middle school students – from 13.1% in 2015 to 12.0% (YTS)

Consumed vegetables less than one time per day (BRFSS)
Adults – from 58.1% in 2015 to 56.0%
African-American women – from 69.6% in 2015 to 67.6%
Adults with less than a high school education – from 62.0% in 2015 to 60.2%

Not eating vegetables one or more times during the past 7 days
High school students – from 6.1% in 2015 to 4.1% (YRBS)
Middle school students – from 21.5% in 2015 to 20.0% (YTS)

Target Audience: All Missourians

Strategies:

1. Collaborate with the Missouri Council for Activity and Nutrition and other partners to promote and support healthy eating and physical activity
2. Implement environmental change strategies to promote and support increased levels of physical activity and healthy eating
3. Engage community coalitions to increase opportunities and support for physical activity and healthy eating
4. Encourage policy development efforts to improve school lunch programs and physical activity levels
5. Advocate for physical education and adequate recess time during the school day

Objective 4: By December 31, 2020, increase the percentage of individuals ages 11 – 17 who receive the human papillomavirus (HPV) vaccine according to CDC guidelines

Measure: Females who received ≥ 1 HPV vaccine – from 47.5% in 2014 to 59.6% (NIS-Teen)

Females who received ≥ 2 HPV vaccine – from 36.3% in 2014 to 51.2% (NIS-Teen)

Females ages 15-17 who received ≥ 3 HPV vaccine – from 28.3% in 2014 to 43.3% (NIS-Teen)

Males who received ≥ 1 HPV vaccine – from 27.9% in 2014 to 39.5% (NIS-Teen)

Males who received ≥ 2 HPV vaccine – from 20.1% in 2014 to 31.0% (NIS-Teen)

Males ages 15-17 who received ≥ 3 HPV vaccine – from 11.3% in 2014 to 22.8% (NIS-Teen)

Target Audience: Health care providers, parents and adolescents

Strategies:

1. Educate providers on the latest HPV research and findings and encourage them to discuss with their patients
2. Promote HPV vaccination as cancer prevention among parents of adolescents, in collaboration with the Missouri Immunization Program and Adolescent Health Program
3. Promote HPV vaccination as cancer prevention among adolescents, in collaboration with the Missouri Immunization Program and Adolescent Health Program

Objective 5: By December 31, 2020, decrease the proportion of adolescents who report a sunburn or use of indoor tanning in the previous year

Measure: Proportion of Missouri adolescents who have had a sunburn in the past 12 months ____% in 2017 to ____% (YRBS) (baseline to be determined)

Proportion of adolescents reporting indoor tanning (sunlamp, sunbed or tanning booth, but not including a spray-on tan) in the past 12 months ____% in 2017 to ____% (YRBS) (baseline to be determined)

Target Audience: Policymakers, parents and adolescents

Strategies:

1. Support the implementation of evidence-based community level ultraviolet (UV) radiation protection programs, policies and messages through partnership with regional health coalitions, schools, local communities and health professionals
2. Address the risks of indoor tanning with improved warning labels and updated performance standards

Early Detection/Screening

Screening means checking your body for cancer before you have symptoms. Regular screening tests may find breast, cervical, colorectal (colon) and other cancers early, when treatment is likely to work best.

Lung Cancer

Lung cancer is the leading cause of cancer mortality in the U.S. with a relative five-year survival rate of just 17 percent.[31] Launched in 2002, the National Lung Screening Trial compared two methods of detecting lung cancer: low-dose helical (spiral) computed tomography (CT) and standard chest X-rays.[32] Both techniques have been used as a means to find lung cancer early, but the effects of these techniques on lung cancer mortality rates had not been determined definitively. This study found that the low-dose CT significantly reduced lung cancer mortality by 20 percent among high-risk individuals. The U.S Preventive Services Task Force now recommends annual screening for lung cancer with the low-dose CT for people 55 to 80 years of age who have a 30 or more pack-per-year history of smoking, are currently smoking, or have quit within the past 15 years.[33] For more information, visit https://www.uspreventiveservicestaskforce.org/BrowseRec/Search?s=lung+cancer.

Breast Cancer

Currently, the best way to find breast cancer is with mammography. Mammograms are the best method to detect breast cancer early when it is easier to treat. A new emerging technology, three-dimensional (3D) mammography, also known as digital breast tomosynthesis, is similar to conventional mammography, but many more pictures of the breast are taken at various angles to produce a 3D image during a regular mammogram. The 3D mammography has been found to detect more invasive cancers and reduce recall rates compared to regular 2D digital or film mammograms, but the full benefits and economical-personal costs remain largely unknown.[34] For more information, visit http://www.cdc.gov/cancer/breast/index.htm.

Cervical Cancer

The Pap test can find abnormal cells in the cervix which may turn into cancer. Pap tests can also find cervical cancer early, when the chance of being cured is very high. For more information, visit www.cdc.gov/cancer/cervical/basic_info/screening.htm.

Colorectal (Colon) Cancer

Colorectal cancer almost always develops from precancerous polyps (abnormal growths) in the colon or rectum. Screening tests can find precancerous polyps that can be removed before they turn into cancer. Screening tests can also find colorectal cancer early, when treatment works best. Colonoscopy is the gold standard screening for colon cancer; however, there are other effective tests that are less invasive and require less preparation than a colonoscopy.[35] Other options include the fecal immunochemical tests, or FIT, approved by the Food and Drug Administration; fecal occult blood tests (FOBT); flexible sigmoidoscopy (only examines the lower one-third of the colon); computed tomography (CT) colonography or virtual colonoscopy; double contrast barium enema; and the newest DNA stool test called Cologuard.[35] For more information, visit www.cdc.gov/cancer/colorectal/basic_info/screening/tests.htm.

Prostate Cancer

Men are at greater risk for developing prostate cancer if they are African-American, Caribbean, and/or have a father, brother or son who has had prostate cancer.[36] Age is also a risk factor, and increases at age 50. The CDC supports informed decision making regarding prostate cancer screening that occurs when a man understands the nature and risk of prostate cancer, understands the risks and benefits of screening and alternatives to screening, participates in the decision to be screened, or not, at a level he desires, and makes a decision consistent with his preferences and values.[37] For more information, see https://www.cdc.gov/cancer/prostate/index.htm.

Goal 2: Increase the early detection of cancer by promoting the use of evidence-based screening guidelines

Objective 1: By December 31, 2020, increase the percentage of women who receive regular breast cancer screening based on nationally recognized guidelines

Measure: The percentage of women 40 and older who had a mammogram within the past two years – from 72.9% in 2012 to 79.3% (BRFSS)

The percentage of women with a household income less than $15,000 who had a mammogram within the past two years – from 58% in 2012 to 70.0% (BRFSS)

The percentage of women with a household income between $15,000 – $24,999 who had a mammogram within the past two years – from 62.8% in 2012 to 75% (BRFSS)

Target Audience: Women ages 40 and over and populations at increased risk

Objective 2: By December 31, 2020, increase the percentage of women who receive cervical cancer screenings based on nationally recognized guidelines

Measure: Women 21 – 65 years who received a Pap test within the last three years – from 80.9% in 2014 to 93% (Healthy People 2020 and U.S. Preventive Services Task Force recommendation)

Target Audience: Women ages 21 and over

Strategies (Objective 1 and 2):

1. Promote evidence-based interventions and recommended screening/early detection exams, according to nationally recognized guidelines
2. Link community resources like Show Me Healthy Women or other breast and cervical screening services to the disparate population
3. Promote evidence-based small media campaigns about the need for breast and cervical cancer screening exams, according to nationally recognized guidelines
4. Provide health care providers with the information and tools to raise awareness of the current cancer screening guidelines
5. Identify unscreened, insured population segments and develop evidence-based targeted interventions to increase screening rates

Objective 3: By December 31, 2020, increase the percentage of colorectal cancer screenings for adults 50 and over

Measure: Missourians 50 and older who have had a colonoscopy in the last 10 years – from 60.5% in 2012 to 80% (BRFSS)

Missourians 50 and older who have had a home blood stool test within the past two years – from 12% in 2012 to 18% (BRFSS)

Target Audience: Missourians age 50 and older and populations at increased risk

Strategies:

1. Promote evidence-based interventions and recommended screening/early detection exams, according to nationally recognized guidelines
2. Promote evidence-based small media campaigns about colorectal cancer risk and the benefits of screening and early detection
3. Promote health care providers' awareness of current cancer screening guidelines and the variety of evidence-based screening options available
4. Link community resources to address barriers within the disparate population
5. Identify unscreened, insured population segments and develop evidence-based targeted interventions to increase screening rates

Objective 4: By December 31, 2020, increase the percent of men who have discussed with their health care provider the advantages and disadvantages of the Prostate-Specific Antigen (PSA) test to screen for prostate cancer (BRFSS)

Measure: Ever been told by a health care provider about the advantages of the PSA test – from 61.1% in 2012 to 70% (BRFSS)

Ever been told by a health care provider about the disadvantages of the PSA test – from 21.9% to 30% (BRFSS)

Target Audience: Men ages 40 and older and populations at increased risk

Strategies:

1. Promote patient informed decision-making regarding prostate cancer screening
2. Identify and provide education materials to encourage health care providers to recommend and deliver prostate cancer screenings based on the latest screening recommendations

Objective 5: By December 31, 2020, increase low-dose computed tomography (LDCT) lung cancer screenings in the targeted at risk population

Measure: Annual screening for lung cancer with LDCT in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years – from ____% in 2017 to _____% (BRFSS) (baseline to be determined)

Target Audience: Health care providers, smokers and former smokers

Strategies:

1. Promote lung cancer screening awareness and guidelines to primary care practices and health systems, such as hospitals and community health centers
2. Implement a campaign to encourage smokers and former smokers to contact their health care provider about lung cancer screening

Diagnosis/Treatment

There are many types of treatment once cancer is diagnosed. The types of treatment that one receives depend on the type of cancer and how advanced it is when detected.[38] Some individuals with cancer will have only one treatment, but most people have a combination of treatments. The main types of cancer treatment include: surgery, radiation therapy, chemotherapy, immunotherapy, targeted therapy, hormone therapy, stem cell transplant, hyperthermia, photodynamic therapy, blood product donation, and transfusion and laser therapy.[38, 39] The National Cancer Institute provides evidence-based physician data query information for many complementary and alternative medicine therapies for patients and health professionals.[40]

Cancer treatment is improving – saving lives and extending survival for different types of cancer, including breast and colon, and for people with leukemias, lymphomas and pediatric cancers. The ultimate measure of success against cancer is quality of life years gained. Access to quality cancer care and clinical trials is important to ensure that everyone is provided with state-of-the-art treatment.

Clinical trials are the major avenue for discovering, developing and evaluating new therapies.[39, 41] However, only about 5.5 percent of all adult cancer patients in Missouri had participated in a clinical trial, according to the 2014 Behavioral Risk Factor Surveillance System data.[15] It is important to increase physician and patient awareness and participation in clinical trials to test new treatments more rapidly, find more effective treatments and broaden the options available to patients. Studies also show that older individuals and members of racial-ethnic minority groups are less likely to receive treatments or participate in clinical trials; thus, minority participation is crucial to address disparities in health outcomes.

Goal 3: Increase access to evidence-based treatment of cancer

Objective 1: By December 31, 2020, increase access to evidence-based treatment services by reducing the number of Missourians who are under/uninsured

Measure: Reduce the percentage of Missourians, age 18-64, who are uninsured – from 18.8% in 2013 to 10% (BRFSS)

Decrease the percentage of Missourians who needed to see a doctor in the past 12 months, but could not due to cost – from 16.1% in 2013 to 14.9% (BRFSS)

Decrease the percentage of survivors who report that they did not have health insurance that paid for all or part of their cancer treatment – from 9.0% in 2010 to 8% (BRFSS)

Target Audience: Uninsured, underinsured and policymakers

Strategies:

1. Support legislation to expand access to health insurance
2. Increase awareness of available health insurance plans

Objective 2: By December 31, 2020, increase the percentage of Missourians with a cancer diagnosis participating in clinical trials

Measure: From 5.5% in 2014 to 7% (BRFSS)

Establish a baseline number of cancer treatment centers that offer clinical trials in Missouri

Target Audience: General public, health care providers and policymakers

Strategies:

1. Develop a method to assess hospitals' patient participation in clinical trials
2. Support legislation that will improve cancer insurance coverage of routine care costs for patients who participate in cancer clinical trials
3. Ensure public awareness about purposes, benefits and enrollment to clinical trials, especially among minority and underserved populations
4. Encourage health care providers to suggest clinical trials as an option for treatment for patients newly diagnosed with cancer
5. Partner with cancer treatment centers to increase access to clinical trials

Objective 3: By December 31, 2020, increase the percent of cancer patients receiving evidence-based treatment according to National Comprehensive Cancer Network guidelines

Measure: Increase the percent of cancer patients receiving treatment within 30 days from the date of diagnosis:

Colon – from 84.9% in 2014 to 86.4%

Lung and bronchus – from 48.4% in 2014 to 49.4%

Melanoma of the skin (all races combined) – from 89.2% in 2014 to 91.3%

Female breast (in situ & invasive combined) – from 62.8% in 2014 to 65.3%

Cervix uteri – from 54.6% in 2014 to 58.7%

Target Audience: Health care providers

Strategies:

1. Increase the number of cancer treatment centers that utilize patient navigators
2. Increase the number of patient navigators who are certified in collaboration with the Academy of Oncology Nurse & Patient Navigators
3. Identify and promote the use of culturally and linguistically appropriate materials for cancer treatment and education
4. Promote evidence-based strategies to reach minority and medically underserved communities to achieve health equity
5. Promote timely utilization and access to evidence-based treatment options, as deemed by national standards, with a focus on health equity and literacy
6. Promote nationally recognized evidence-based treatment services among health care providers
7. Promote informed decision-making and utilization of appropriate cancer treatment
8. Support federal and state policies/legislation to enhance access to cancer treatment

Survivorship Through the End of Life

Due to advances in the early detection and treatment of cancer, people are living many years after a diagnosis. However, disparities in health care impact survival. Low-income men and women who have inadequate or no health insurance coverage are more likely to be diagnosed with cancer at a later stage, often reducing survival time.

For the approximately 336,230 adult cancer survivors living in Missouri,[15] access to resources and supports that address physical, emotional, social, spiritual and financial challenges due to a cancer diagnosis and treatment is critical to long-term recovery and quality of life.[15] Public health professionals strive to address survivorship and quality of life issues, such as the coordination of care, patient-provider communication, palliative care, pain management and fertility preservation. In light of these concerns, public health initiatives aimed at understanding and preventing secondary disease, recurrence and the long-term effects of treatment are essential.

Cancer changes a person's health care needs forever, and the National Coalition for Cancer Survivorship believes every person with cancer should receive written care plans and summaries that follow them from the time they are diagnosed through all the years of survivorship.[42] Although the Survivorship Care Plan (SCP) is a useful tool for patients and primary care physicians, more work is needed regarding care coordination and provider roles. In addition, future challenges involve the need for adequate reimbursement for creation and delivery of SCPs, as well as outcome studies to determine if SCPs improve patient outcomes.[43]

Goal 4: Assure the highest quality of life possible for cancer survivors and their families, including end-of-life transitions

Objective 1: By December 31, 2020, improve quality of life for cancer survivors, including physical and mental health, and end-of-life transitions

Measure: Decrease the number of cancer survivors who report having physical pain caused by cancer or cancer treatment – from 6.3% in 2014 to 4.5% (BRFSS)

Decrease the percentage of adults aged 18 years and older diagnosed with cancer who reported being kept from usual activities due to poor physical or mental health on 14 or more of the past 30 days – from 28.8% in 2014 to 23.5% (BRFSS)

Increase the average number of hospice days per cancer patient in Missouri during the last month of life – from 10 in 2012 to 14 (Dartmouth Atlas of Health Care)

Increase the percentage of survivors reporting receipt of a written treatment summary – from 35.0% in 2014 to 40.5% (BRFSS)

Target Audience: General public, cancer survivors, health care providers and policymakers

Strategies:

1. Identify educational resources about cancer survivorship for survivors, the general public, health care professionals and policymakers
2. Disseminate educational materials and programs on survivorship to promote knowledge and understanding of survivorship issues
3. Promote local and statewide survivorship events
4. Identify and evaluate gaps in existing survivorship programs and policies
5. Identify and promote comprehensive pain management programs for cancer survivors
6. Make available advance care planning and goals of care tools and resources for those with advanced illness, incorporating steps to target identified disparate populations (age, income, disability, rural-urban location, and race or ethnic status)
7. Support and promote policies and programs to reduce the financial burden on cancer survivors and their families

Objective 2: By December 31, 2020, increase health care providers' education regarding survivorship issues, including end of life, to improve comprehensive cancer care and management

Measure: Increase the percent of cancer survivors receiving information or a written SCP – from 69.1% in 2014 to 72.2% (BRFSS)

Provide one or more professional educational opportunities by 2020 to increase knowledge of comprehensive cancer care and management regarding survivorship issues

Target Audience: Health care providers and individuals with cancer

Strategies:

1. Support development and use of SCPs
2. Identify oncological champions to provide survivorship education and promote comprehensive cancer survivorship care and management including preventive and screening services
3. Identify and reduce barriers to ensure equal access to quality care and services
4. Increase information and awareness to survivors, health care providers and policymakers about quality-of-life issues and service needs of people of various ages and ethnic, racial and economic backgrounds during each stage of survivorship

Objective 3: By December 31, 2020, increase awareness regarding policies addressing cancer survivorship

Measure: State policies reviewed and gap analysis completed

Creation of council on palliative care and quality of life

Target Audience: Policymakers

Strategies:

1. Identify policies addressing cancer survivorship issues
2. Promote policies that address the gaps and the barriers in areas of survivorship by creating a statewide survivorship advisory council on palliative care and quality of life
3. Disseminate information regarding gaps in cancer survivorship policies
4. Develop a plan to address gaps in cancer survivorship policies